

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**AIR QUALITY PERMIT
Issued under 401 KAR 52:040**

Permittee Name: Mosaic Crop Nutrition, LLC
Mailing Address: 2051 West Geneva Road
Henderson, Kentucky 42420

Source Name: Mosaic Henderson Warehouse
Mailing Address: Same as above

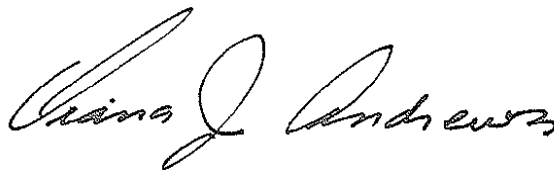
Source Location: 2051 West Geneva Road
Henderson, Kentucky 42420

Permit Number: S-06-316
Source A. I. #: 1819
Activity #: APE20060001
Review Type: Renewal/Operating
Source ID #: 21-101-00021

Regional Office: Owensboro Regional Office
3032 Alvey Park Drive W., Suite 700
Owensboro, Kentucky 42303-2191
(270) 687-7304

County: Henderson

Application
Complete Date: November 16, 2006
Issuance Date: November 27, 2006
Revision Date: NA
Expiration Date: November 27, 2016



**John S. Lyons, Director
Division for Air Quality**

PERMIT AUTHORIZATION

Pursuant to a duly submitted application, which was determined to be complete on November 16, 2006, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and receiving a permit for the planned activity from the Division, except as provided in this permit or in Regulation 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**DRY FERTILIZER TERMINAL:**

- 01 (B1) **Receiving (Barge)**
 (Maximum Rated Capacity – 150 tons/hour)
 [From Barge to Conveyor (C1)]
 Constructed: 1968
 Control: Enclosure
- (C1) **Conveyor and Transfer Points**
 (Maximum Rated Capacity – 150 tons/hour)
 [From Barge Receiving (B1) to Conveyor (C2)]
 Constructed: 1968
 Control: Enclosure
- (C2) **Conveyor and Transfer Points**
 (Maximum Rated Capacity – 150 tons/hour)
 [From Conveyor (C1) to Conveyor (C3)]
 Constructed: 1968
 Control: Enclosure
- (C3) **Conveyor and Transfer Points**
 (Maximum Rated Capacity – 150 tons/hour)
 [From Conveyor (C2) to Loadout (L1) & Main Warehouse (-)]
 Constructed: 1968
 Control: Enclosure
- (L1) **Loadout (Truck)**
 (Maximum Rated Capacity – 150 tons/hour)
 [From Conveyor (C3) to Main Warehouse (-) or Directly to Customer Truck]
 Constructed: 1968
 Control: Enclosure
- (-) **Indoor Storage (Main Warehouse)**
 (Maximum Rated Capacity – 150 tons/hour)
 [From Conveyor (C3) or Truck Receiving (T1) to Conveyors (C4a-c) & (PC1)]
 Constructed: 1968
 Control: Enclosure
- (T1) **Receiving (Truck)**
 (Maximum Rated Capacity –150 tons/hour)
 [From Truck to Warehouse]
 Constructed: 1968
 Control: Enclosure

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 01 (PC1) Conveyor and Transfer Points (Portable)**
(Maximum Rated Capacity – 30 tons/hour)
[From Warehouse to Loadout (L3)]
Constructed: 1968
Control: Enclosure
- (L3) Loadout (Truck)**
(Maximum Rated Capacity – 30 tons/hour)
[From Portable Conveyor (PC1) to Truck]
Constructed: 1968
Control: Enclosure
- (C4a) Conveyor and Transfer Points**
(Maximum Rated Capacity – 60 tons/hour)
[From Main Warehouse (-) to Rail Loadout (R1a) or Truck Loadout (L2a)]
Constructed: 1968
Control: Enclosure
- (C4b) Conveyor and Transfer Points**
(Maximum Rated Capacity – 60 tons/hour)
[From Main Warehouse (-) to Truck Loadout (L2b)]
Constructed: 1968
Control: Enclosure
- (C4c) Conveyor and Transfer Points**
(Maximum Rated Capacity – 60 tons/hour)
[From Main Warehouse (-) to Truck Loadout (L2c)]
Constructed: 1968
Control: Enclosure
- (R1a/L2a) Loadout (Rail or Truck)**
(Maximum Rated Capacity – 60 tons/hour)
[From Conveyor (C4a) to Rail Car or Truck]
Constructed: 1968
Control: Enclosure
- (L2b) Loadout (Truck)**
(Maximum Rated Capacity – 60 tons/hour)
[From Conveyor (C4b) to Truck]
Constructed: 1968
Control: Enclosure

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (L2c) Loadout (Truck)
(Maximum Rated Capacity – 60 tons/hour)
[From Conveyor (C4c) to Truck]
Constructed: 1968
Control: Enclosure

GRAIN TERMINAL:

02 (G1) Receiving (Truck)
(Maximum Rated Capacity – 100 tons/hour)
[From Truck to Conveyor (G2)]
Constructed: 1968
Control: Enclosure

(G2) Conveyor and Transfer Points
(Maximum Rated Capacity –100 tons/hour)
[From Truck to Grain Storage Warehouse (-)]
Constructed: 1968
Control: Enclosure

(-) Indoor Storage (Grain Storage Warehouse)
(Maximum Rated Capacity –100 tons/hour)
[From Conveyor (G2) to Conveyor (G3)]
Constructed: 1982
Control: Enclosure

(G3) Conveyor and Transfer Points
(Maximum Rated Capacity –100 tons/hour)
[From Grain Storage Warehouse (-) to Loadout (G4)]
Constructed: 1968
Control: Enclosure

(G4) Loadout (Truck)
(Maximum Rated Capacity –100 tons/hour)
[From Conveyor (G3) to Truck]
Constructed: 1968
Control: Enclosure

HAUL ROAD/YARDAREA:

03 (-) Haul Road/Yard Area (Paved)
(Maximum Rated Capacity –650 tons/hour)
[From Truck Receiving & Loadouts]
Constructed: 1968
Control: Water Sprays

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**APPLICABLE REGULATIONS:**

State Regulation 401 KAR 63:010, Fugitive emissions, applies to each of the affected facilities listed above.

1. Operating Limitations:

N/A

2. Emission Limitations:

- a. The materials processed at each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment so as to comply with the requirements specified in Regulation 401 KAR 63:010, Fugitive emissions, Section 3. Standards for fugitive emissions.
- b. Pursuant to Regulation 401 KAR 63:010, Section 3 (1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - 2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - 3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations.
 - 4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - 5) The maintenance of paved roadways in a clean condition;
 - 6) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- c. Pursuant to Regulation 401 KAR 63:010, Section 3 (2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (Continued)

- d. Pursuant to Regulation 401 KAR 63:010, Section 3 (3), when dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.
- e. Pursuant to Regulation 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:
 - 1) Pursuant to Regulation 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.
 - 2) Pursuant to Regulation 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

Compliance Demonstration Method:

See Section C, General Condition F.1.

3. Testing Requirements:

NA

4. Monitoring Requirements:

See Section C, General Condition F.1.

5. Recordkeeping Requirements:

See Section C, General Conditions B.1., B.2., and F.1.

6. Reporting Requirements:

See Section C, General Conditions C.1., C.2., C.3., and F.2.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

04 (H-1R) Uniflux Ammonia Heater
Natural Gas Fired (25mm BTU/hour)
Constructed: 1989
Control: NA

APPLICABLE REGULATIONS:

State Regulation 401 KAR 59:015, New indirect heat exchangers, which applies to emission units with a rated capacity of 250 mmBTU/hr or less constructed on or after April 9, 1972

1. Operating Limitations:

N/A

2. Emissions Limitations:

- a. Pursuant to State Regulation 401 KAR 59:015, Section 4(1)(c), emissions of particulate matter from the indirect heat exchanger shall not exceed 0.451 lbs/mmBTU actual heat input.
- b. Pursuant to State Regulation 401 KAR 59:015, Section 4(2), the opacity of visible emissions from the combustion of natural gas shall not exceed twenty (20) percent except that:
 - (1) Pursuant to State Regulation 401 KAR 59:015, Section 4(2)(b), a maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
 - (2) Pursuant to State Regulation 401 KAR 59:015, Section 4(2)(c), for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c. Pursuant to State Regulation 401 KAR 59:015, Section 5(1)(c)1., emissions of sulfur dioxide from the indirect heat exchanger shall not exceed 2.059 lbs/mmBTU actual heat input.

Compliance Demonstration Method:

This unit is considered to be in compliance with the PM, SO₂, and opacity standards while burning natural gas.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

NA

4. Monitoring Requirements:

- a. The permittee shall monitor the fuel usage on a monthly basis.
- b. See Section C, General Condition F.1.

5. Recordkeeping Requirements:

- a. Records of the amount of natural gas burned shall be maintained on a monthly basis.
- b. See Section C, General Conditions B.1., B.2., and F.1.

6. Reporting Requirements:

See Section C, General Conditions C.1., C.2., C.3., and F.2.

SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of State Regulation 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
3. Any condition or portion of this permit, which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit.
[Cabinet Provisions and Procedures for Issuing State-Origin Permits, Section 1a, 11]
4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Cabinet Provisions and Procedures for Issuing State-Origin Permits, Section 1a, 4 and 5]
5. This permit does not convey property rights or exclusive privileges. [Cabinet Provisions and Procedures for Issuing State-Origin Permits, Section 1a, 8].
6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
7. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in State Regulation 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
8. All permits previously issued to this source at this location are hereby null and void.

SECTION C - GENERAL CONDITIONS (CONTINUED)**B. Recordkeeping Requirements**

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:040, Sections 1b, IV. 2) and 1a, 7); and 401 KAR 52:040 Section 3(1)(f)]
2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to State Regulation 401 KAR 52:040, Section 21.

C. Reporting Requirements

1. a. In accordance with the provisions of State Regulation 401 KAR 50:055, Section 1 the permittee shall notify the Division for Air Quality's Owensboro Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
- b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions [other than emission exceedances covered by Reporting Requirement condition 1 a) above], the probable cause of the deviation, and corrective or preventive measures taken; to the Division for Air Quality's Owensboro Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report. [Cabinet Provisions and Procedures for Issuing State-Origin Permits, Section 1b. V. 3]
2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Cabinet Provisions and Procedures for Issuing State-Origin Permits, Section 1a, 6].
3. Summary reports of any monitoring required by this permit shall be reported to the Division for Air Quality's Owensboro Regional Office at least every six (6) months during the life of this permit. The summary reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official. All deviations from permit requirements shall be clearly identified in the reports. [401 KAR 52:040, section 21]

SECTION C - GENERAL CONDITIONS (CONTINUED)**D. Inspections**

1. In accordance with the requirements of State Regulation 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Inspect any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
 - d. Sample or monitor substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

E. Emergencies/Enforcement Provisions

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Cabinet Provisions and Procedures for Issuing State-Origin Permits, Section 1a, 3].
2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

SECTION C - GENERAL CONDITIONS (CONTINUED)**F. Compliance**

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following shall be followed:
 - a. Pursuant to State Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.
 - b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device. Daily observations are required during daylight hours of all operations, control equipment and any visible emissions to determine whether conditions appear to be either normal or abnormal. If the operations, controls and/or emissions appear abnormal, the permittee must then comply with the requirements of Section C – General Conditions, C.1.b., of this permit.
 - c. A log of the monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program (spread sheets), calculations or performance tests as may be specified by the Division.
2. Pursuant to State Regulation 401 KAR 52:040, Section 19, the permittee shall annually complete and return a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division's Owensboro Regional Office in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period; and
 - e. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Owensboro Regional Office 3032 Alvey Park Drive W., Suite 700 Owensboro, KY 42303-2191	Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601
--	---
3. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all applicable requirements for:
 - a. Applicable requirements included and specifically identified in the permit; or
 - b. Non-applicable requirements expressly identified in this permit.

SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
Natural Gas Burner (75,000 BTU/hour) (flare: control device for anhydrous ammonia tanks)	50:055
Anhydrous Ammonia Tank (8,000,000 gallons)	50:055
Anhydrous Ammonia Tank (8,000,000 gallons)	50:055
Anhydrous Ammonia Handling	50:055
Liquid Fertilizer Tank (1,758,152 gallons)	50:055
Liquid Fertilizer Tank (1,758,152 gallons)	50:055
Liquid Fertilizer Tank (1,758,152 gallons)	50:055
Liquid Fertilizer Tank (879,076 gallons)	50:055
Liquid Fertilizer Handling	50:055